

&lt;!--StartFragment--&gt;RESULT 2

AAE37790

ID AAE37790 standard; protein; 328 AA.

XX

AC AAE37790;

XX

DT 06-NOV-2003 (first entry)

XX

DE Human diacylglycerol acyltransferase 2 (DGAT2), 112023.

XX

KW Human; diacylglycerol acyltransferase 2; DGAT2; obesity; arrhythmia;

KW coronary artery disease; hypertension; heart failure; tissue typing;

KW aberrant lipogenesis; cardiovascular disorder; atherosclerosis; angina;

KW atrial fibrillation; dilated cardiomyopathy; idiopathic cardiomyopathy;

KW diabetes; chromosome mapping; forensic biology; enzyme.

XX

OS Homo sapiens.

XX

PN WQ2003053363-A2.

XX

PD 03-JUL-2003.

XX

PF 19-DEC-2002; 2002WO-US040974.

XX

PR 19-DEC-2001; 2001US-0341947P.

PR 19-SEP-2002; 2002US-0411859P.

XX

PA (MILL-) MILLENNIUM PHARM INC.

XX

PI Gimeno RE, Wu Z, Kapeller-Libermann R, Hubbard BK;

XX

DR WPI; 2003-559092/52.

DR N-PSDB; AAD56890.

XX

PT New human diacylglycerol acyltransferase 2 (DGAT2) family member

PT polypeptide and nucleic acid molecules, useful for diagnosing and

PT treating obesity, diabetes, atherosclerosis, aberrant lipogenesis or

PT triglyceride synthesis.

XX

PS Claim 6; Page 134-135; 154pp; English.

XX

CC The invention relates to human diacylglycerol acyltransferase 2 (DGAT2)

CC family members and their uses. DGAT2 family member sequences or their

CC modulators are useful for diagnosing and treating a subject with a

CC disorder associated with the aberrant DGAT family member polypeptide

CC activity or nucleic acid expression, such as a disorder associated with

CC obesity, diabetes, aberrant lipogenesis or triglyceride synthesis, or

CC cardiovascular disorder (e.g. atherosclerosis, coronary artery disease,

CC hypertension, heart failure, atrial fibrillation, arrhythmias, dilated

CC cardiomyopathy, idiopathic cardiomyopathy or angina). The invention is

CC also useful in screening assays (e.g. tissue typing, chromosome mapping,

CC or in forensic biology), in predictive medicine (e.g. diagnostic assays,

CC prognostic assays, monitoring clinical trials or pharmacogenetics), or as

CC surrogate markers (e.g. markers of disease states or markers of drug

CC activity). The present sequence is human DGAT2 protein

XX

SQ Sequence 328 AA;

Query Match 99.2%; Score 1788; DB 1; Length 328;

Best Local Similarity 99.4%;

Matches 326; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

```
Qy      1 MAHSKQPSHFQSLMLLQWPLSYLAIFWILQPLFVYLLFTSLWPLPVLYFAWLFLDWKTPE 60
        |||
Db      1 MAHSKQPSHFQSLMLLQWPLSYLAIFWILQPLFVYLLFTSLWPLPVLYFAWLFLDWKTPE 60

Qy     61 RGGRRSAWVRNWCWVWTHIRDYFPITILKTKDLSPEHNYLMGVHPHGLLTFGAFCNFCTEA 120
        |||
Db     61 RGGRRSAWVRNWCWVWTHIRDYFPITILKTKDLSPEHNYLMGVHPHGLLTFGAFCNFCTEA 120

Qy    121 TGFSKTFPGITPHLATLSWFFKIPFVREYLMAGVCSVSQPAINYLLSHGTGNLVGIVVG 180
        |||
Db    121 TGFSKTFPGITPHLATLSWFFKIPFVREYLMAGVCSVSQPAINYLLSHGTGNLVGIVVG 180

Qy    181 GVGEALQSVPNTTTTLILQKRKGFVRTALQHGAHLVPTFTFGETEVYDQVLFHKDSRMYKF 240
        |||
Db    181 GVGEALQSVPKTTTTLILQKRKGFVRTALQHGAHLVPTFTFGETEVYDQVLFHKDSRMYKF 240

Qy    241 QSCFRRIFGFYCCVFYQSFQCGSTGLLPYSRPIVTVVGEPLPLPQIEKPSQEMVDKYHA 300
        |||
Db    241 QSCFRRIFGFYCCVFYQSFQCGSTGLLPYSRPIVTVVGEPLPLPQIEKPSQEMVDKYHA 300

Qy    301 LYMDALHKLFDQHKTHYGCSETQKLFFL 328
        |||
Db    301 LYMDALDKLFDQHKTHYGCSETQKLFFL 328
<!--EndFragment-->
```